**Docket: H-US-00497 (1544-3)** 

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PLICANT(S): Roman Turovskiy, et al. EXAMINER:

Peter J. Vrettakos

SERIAL NO.:

10/622,800

GROUP:

Art Unit: 3739

FILED:

July 18, 2003

DATED:

November 22, 2005

TITLE:

**DEVICES AND METHODS FOR** 

COOLING MICROWAVE ANTENNAS

Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to Applicant(s) duty of disclosure, the information listed in the attached form PTO/SB/08A is brought to the attention of the Examiner. Copies of the U.S. patent documents are not provided in accordance with the waiver of that requirement under 37 C.F.R. §1.98.

The citation of the listed items is not a representation that they constitute a complete or exhaustive listing of the relevant art or that the references are prior art. The items listed are submitted in good faith, but are not intended to substitute for the Examiner's search. It is hoped, however, that in addition to apprising the Examiner of these particular items, they will assist in identifying fields of search and in making as full and complete a search as possible.

The filing of this information disclosure statement is not an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

#### CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Dated: November 22, 2005

[X] Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. §1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account <u>50-2140</u>. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. <u>50-2140</u> therefor.

The claims of the application as now presented are believed to patentably distinguish over the prior art and to be in condition for allowance. Early and favorable consideration of the case is respectfully requested.

Respectfully submitted,

Francesco Sardone Reg. No. 47,918

Attorney for Applicant(s)

Carter, DeLuca, Farrell & Schmidt, LLP

445 Broad Hollow Road - Suite 225

Melville, New York 11747

Tel.: (631) 501-5700 Fax: (631) 501-3526

FS/nr

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

substitute for form 1449A/PTO

# NFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

| Complete if Known      |                         |  |  |  |
|------------------------|-------------------------|--|--|--|
| Application Number     | 10/622,800              |  |  |  |
| Filing Date            | July 18, 2005           |  |  |  |
| First Named Inventor   | Roman Turovskiy, et al. |  |  |  |
| Art Unit               | 3739                    |  |  |  |
| Examiner Name          | Peter J. Vrettakos      |  |  |  |
| Attorney Docket Number | H-US-00497 (1544-3)     |  |  |  |

| xaminer                                 | Cito     |   | Publication Date | WITHOUT REFERENCES                                 | Page Caluma Line Miles  |
|---|----------|---|------------------|--|---|
|   | No.1     | Document Number  Number-Kind Code <sup>2 (# known</sup> ) | - MM-DD-YYYY     | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear   |
|   |          | 2001/0051131  | 12/13/2001       | Unger  | r igures Appear   |
|   | ļ        | 2002/0059938  | 05/23/2002       | Fogarty et al.                                     |   |
|   | <b> </b> | 2003/0195499  | 10/16/2003       | Prakash et al.                                     |   |
|   |          | 2003/0208199  | 11/06/2003       | Keane  |   |
|   |          | 2004/0168692  |                  |  |   |
| <del></del>                             |          | 2004/0267156  | 09/02/2004       | Fogarty et al.  Turovskiy et al.                   |   |
|   | ļ        | 2005/0015081  | 12/30/2004       |  |   |
|   | ļ        | 2005/0013081  | 01/20/2005       | Turovskiy et al.  Prakash et al.                   |   |
|   | -        |   | 03/24/2005       |  |   |
| *************************************** | ļ        | 2,022,065   | 11/26/1935       | Wappler  |   |
|   | ļ        | 2,047,535   | 07/14/1936       | Wappler  |   |
|   | ļ        | 3,320,341   | 05/001967        | Mackie William                                     |   |
|   | ļ        | 3,330,278   | 07/11/1967       | Santomieri   |   |
|   |          | 3,351,463   | 11/07/1967       | Rozner et al.                                      |   |
|   | <u> </u> | 3,516,412   | 06/23/1970       | Ackerman   |   |
|   |          | 3,714,851   | 02/06/1973       | Orser  |   |
|   | ļ        | 3,753,700   | 08/21/1973       | Harrison et al.                                    |   |
| ···········                             |          | 3,890,977   | 06/24/1975       | Wilson   | PAO AMBANDO DE PARTO |
|   |          | 4,010,756   | 03/08/1977       | DuMont et al.                                      |   |
|   |          | 4,103,690   | 08/01/1978       | Harris   |   |
|   |          | 4,274,408   | 06/23/1981       | Nimrod   |   |
|   |          | 4,341,226   | 07/27/1982       | Peters   |   |
|   |          | 4,402,328   | 09/06/1983       | Doring   |   |
|   |          | 4,592,356   | 06/03/1986       | Gutierrez  |   |
|   |          | 4,595,007   | 06/17/1986       | Mericle  |   |
|   |          | 4,616,656   | 10/14/1986       | Nicholson et al.                                   |   |
|   |          | 4,621,642   | 11/11/1986       | Chen   |   |
|   |          | 4,633,880   | 01/06/1987       | Osypka et al.                                      |   |
|   |          | 4,665,906   | 05/19/1987       | Jervis   |   |
|   |          | 4,682,606   | 07/28/1987       | DeCaprio   |   |
|   |          | 4,700,716   | 10/20/1987       | Kasevich et al.                                    |   |
|   |          | 4,799,495   | 01/24/1989       | Hawkins et al.                                     |   |
|   |          | 4,869,259   | 09/26/1989       | Elkins   |   |
|   |          | 4,925,445   | 05/15/1990       | Sakamoto et al.                                    | •   |
|   |          | 4,966,583   | 10/30/1990       | Debbas   |   |
| *************************************** |          | 5,011,473   | 04/30/1991       | Gatturna   |   |
| ······································  | <b>†</b> | 5,018,530   | 05/28/1991       | Rank et al.  | **************************************  |
|   | 1        | 5,059,197   | 10/22/1991       | Urie et al.  |   |
| *************************************** | ·        | 5,067,957   | 11/26/1991       | Jervis   |   |
|   | 1        | 5,122,136   | 06/16/1992       | Guglielmi et al.                                   |   |
|   |          | 5,158,084   | 10/27/1992       | Ghiatas  |   |
|   | 1        | 5,183,463   | 02/02/1993       | Debbas   |   |
|   | 1        | 5,190,546   | 03/02/1993       | Jervis   |   |

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 4

| Complete if Known      |                         |  |  |
|------------------------|-------------------------|--|--|
| Application Number     | 10/622,800              |  |  |
| Filing Date            | July 18, 2005           |  |  |
| First Named Inventor   | Roman Turovskiy, et al. |  |  |
| Art Unit               | 3739                    |  |  |
| Examiner Name          | Peter J. Vrettakos      |  |  |
| Attorney Docket Number | H-US-00497 (1544-3)     |  |  |

| xaminer<br>nitials*                     | Cite<br>No.1   | Document Number  Number-Kind Code <sup>2 (f known</sup> ) | Publication Date - MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|---|----------------|---|-------------------------------|--|---|
|   |                | 5,197,482   | 03/30/1993                    | Rank et al.  |   |
|   | i              | 5,205,829   | 04/27/1993                    | Lituchy  |   |
|   | ļ              | 5,217,027   | 06/08/1993                    | Hermens  |   |
|   | <del> </del>   | 5,282,845   | 02/01/1994                    | Bush et al.  |   |
|   | ļ              | 5,300,068   | 04/05/1994                    | Rosar et al.                                       |   |
| ~~~~                                    |                | 5,301,682   | 04/12/1994                    | Debbas   |   |
| <del></del>                             | ļ              | 5,350,419   | 09/27/1994                    | Bendel et al.                                      |   |
| *************************************** | ·              | 5,353,804   | 10/11/1994                    | Kornberg et al.                                    |   |
|   | ļ              | 5,409,004   | 04/25/1995                    | Sloan  | ,   |
|   | <del></del>    | 5,405,346   | 04/11/1995                    | Grundy et al.                                      |   |
|   | <del> </del>   | 5,462,062   | 10/31/1995                    | Rubinstein et al.                                  |   |
|   |                | 5,472,441   | 12/05/1995                    | Edwards et al.                                     |   |
|   | ·              | 5,486,183   | 01/23/1996                    | Middleman et al.                                   |   |
| <del></del>                             | <del> </del>   | 5,488,958   | 02/06/1996                    | Topel et al.                                       |   |
|   |                | 5,536,267   | 07/16/1996                    | Edwards et al.                                     |   |
|   | <del> </del>   | 5,540,683   | 07/30/1996                    | Ichikawa et al.                                    |   |
| <del></del>                             |                | 5,556,377   | 09/17/1996                    | Rosen et al.                                       |   |
|   |                | 5,556,410   | 09/17/1996                    | Mittermeir et al.                                  |   |
|   | 1              | 5,558,673   | 09/24/1996                    | Edwards et al.                                     |   |
|   | -              | 5,599,294   | 02/04/1997                    | Edwards et al.                                     |   |
|   |                | 5,672,173   | 09/30/1997                    | Gough et al.                                       |   |
|   | ·              | 5,672,174   | 09/30/1997                    | Gough et al.                                       |   |
|   | <del> </del>   | 5,683,384   | 11/04/1997                    | Gough et al.                                       |   |
|   | - <del> </del> | 5,685,853   | 11/11/1997                    | Bonnet   |   |
|   | <del> </del>   | 5,700,243   | 12/23/1997                    | Narciso Jr.  |   |
|   |                | 5,709,697   | 01/20/1998                    | Ratcliff et al.                                    |   |
|   |                | 5,720,718   | 02/24/1998                    | Rosen et al.                                       |   |
|   | -              | 5,735,847   | 04/07/1998                    | Gough et al.                                       |   |
|   | -              | 5,741,225   | 04/21/1998                    | Lax et al.   |   |
|   |                | 5,749,887   | 05/12/1998                    | Heske et al.                                       |   |
|   |                | 5.794,626   | 08/18/1998                    | Kieturakis   |   |
| ···                                     | -              | 5,795,308   | 08/18/1998                    | Russin   |   |
|   | -              | 5,800,484   | 09/01/1998                    | Gough et al.                                       |   |
|   |                | 5,807,339   | 09/15/1998                    | Bostrom et al.                                     |   |
|   |                | 5,853,366   | 12/29/1998                    | Dowlatshahi  | **************************************  |
| *************************************** | _              | 5,855,576   | 01/05/1999                    | LeVeen et al.                                      |   |
|   |                | 5,863,290   | 01/26/1999                    | Gough et al.                                       |   |
|   |                | 5,871,523   | 02/16/1999                    | Fleischman et al.                                  |   |
| ·····                                   |                | 5,879,357   | 03/09/1999                    | Heaton et al.                                      |   |
|   | <u> </u>       | 5,882,316   | 03/16/1999                    | Chu et al.   |   |
|   |                | 5,902,310   | 05/11/1999                    | Foerster et al.                                    |   |
|   |                | 5,904,690   | 05/18/1999                    | Middleman et al.                                   |   |

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3 of 4

| Complete if Known      |                         |  |
|------------------------|-------------------------|--|
| Application Number     | 10/622,800              |  |
| Filing Date            | July 18, 2005           |  |
| First Named Inventor   | Roman Turovskiy, et al. |  |
| Art Unit               | 3739                    |  |
| Examiner Name          | Peter J. Vrettakos      |  |
| Attorney Docket Number | H-US-00497 (1544-3)     |  |

| xaminer  | U.S.PATENTDOCUMENTS WITHOUT REFERENCES  xaminer Cite |   |            |                                |   |  |
|--|--|---|------------|--------------------------------|---|--|
|  | No.1   | Number-Kind Code <sup>2</sup> (# known) | MM-DD-YYYY | Applicant of Cited Document    | Relevant Passages or Relevant<br>Figures Appear |  |
|  |  | 5,904,691                               | 05/18/1999 | Barnett et al.                 | · iguioo / ippodi                               |  |
| <del></del>                                      |  | 5.941,890                               | 08/24/1999 | Voegele et al.                 |   |  |
|  |  | 5,954,655                               | 09/21/1999 | Hussman                        |   |  |
| <del></del>                                      |  | 5,954,719                               | 09/21/1999 | Chen et al.                    |   |  |
| ***************************************          |  | 5,989,265                               | 11/23/1999 | Bouquet De La Joliniere et al. |   |  |
|  | ļ  | 6,007,495                               | 12/28/1999 | Matula                         |   |  |
|  | <b>†</b>   | 6,019,757                               | 02/01/2000 | Scheldrup                      |   |  |
| ***************************************          |  | 6,022,362                               | 02/08/2000 | Lee et al.                     |   |  |
|  |  | 6,027,524                               | 02/22/2000 | Petit                          |   |  |
| <del></del>                                      |  | 6,039,735                               | 03/21/2000 | Greep                          |   |  |
|  |  | 6,050,954                               | 04/18/2000 | Mittermeier                    |   |  |
|  | -  | 6,051,008                               | 04/18/2000 | Saadat et al.                  |   |  |
|  | ·  | 6,053,876                               | 04/25/2000 | Fisher                         |   |  |
| ***************************************          |  | 6,053,925                               | 04/25/2000 | Bamhart                        |   |  |
| ·····  | <u> </u>   | 6,056,744                               | 05/02/2000 | Edwards                        |   |  |
|  |  | 6,080,113                               | 06/27/2000 | Heneveld et al.                |   |  |
|  |  | 6,080,114                               | 06/27/2000 | Russin                         |   |  |
| <del>*************************************</del> |  | 6,146,657                               | 11/14/2000 | Unger                          |   |  |
| ***************************************          |  | 6,176,856                               | 01/23/2001 | Jandak et al.                  |   |  |
|  | 1  | 6,245,318                               | 06/12/2001 | Klibanov et al.                |   |  |
| ······································           |  | 6,277,113                               | 08/21/2001 | Berube                         |   |  |
|  |  | 6,330,479                               | 12/11/2001 | Stauffer                       |   |  |
|  |  | 6,347,251                               | 02/12/2002 | Deng                           |   |  |
| ***************************************          |  | 6,405,733                               | 06/18/2002 | Fogarty et al.                 |   |  |
| ***************************************          |  | 6,496,738                               | 12/17/2002 | Сагг                           |   |  |
|  |  | 6,530,922                               | 03/11/2003 | Cosman et al.                  |   |  |
|  | 1  | 6,551,311                               | 04/22/2003 | Lee et al.                     |   |  |
|  |  | 6,564,806                               | 05/20/2003 | Fogarty et al.                 |   |  |
|  |  | 6,569,159                               | 05/27/2003 | Edwards et al.                 |   |  |
|  |  | 6,611,699                               | 08/26/2003 | Messing                        |   |  |
| ***************************************          |  | 6,622,731                               | 09/23/2003 | Daniel et al.                  |   |  |
|  |  | 6,663,624                               | 12/16/2003 | Edwards et al.                 |   |  |
|  |  | 6,685,700                               | 02/03/2004 | Behl et al.                    |   |  |
|  |  | 6,699,241                               | 03/02/2004 | Rappaport et al.               |   |  |
| ***************************************          |  | 6,722,371                               | 04/20/2004 | Fogarty et al.                 |   |  |
|  | ļ  | 6,752,154                               | 06/22/2004 | Fogarty et al.                 |   |  |
|  |  | 6,752,767                               | 06/22/2004 | Turovskiy et al.               |   |  |
|  |  | 6,878,147                               | 04/12/2005 | Prakash et al.                 |   |  |

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4 of 4

| Comp                   | lete if Known           |
|------------------------|-------------------------|
| Application Number     | 10/622,800              |
| Filing Date            | July 18, 2005           |
| First Named Inventor   | Roman Turovskiy, et al. |
| Art Unit               | 3739                    |
| Examiner Name          | Peter J. Vrettakos      |
| Attorney Docket Number | H-US-00497 (1544-3)     |

|                       | -                                       | FOREIGN PATENT D  | OCUMENTS W   | TH REFERENCES                   |   |                |
|-----------------------|---|---|--|---------------------------------|---|----------------|
| Examiner<br>Initials* | Cite<br>No.1                            | Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (# known) | Publication Date Name of Patentee or MM-DD-YYYYY Applicant of Cited Document |                                 | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T⁵             |
| -                     |   | EP 0 385 604 A2   | 09/05/1990   | O'Neill                         | or relevant rigures Appear  | ╁              |
|                       | <del></del>                             | EP 0 395 997 A1   | 11/07/1990   | Houghton, et al.                | ***************************************   | ╁              |
|                       | <del> </del>                            | EP 0 829 232 A2   | 03/18/1998   | Chu, et al.                     |   | ╁              |
|                       | · <b></b>                               | WO 88/06864   | 09/22/1988   | Hawkins, et al.                 |   | ╁              |
|                       |   | WO 92/12678   | 08/06/1992   | Spencer, et al.                 |   | ╁              |
|                       | +                                       | WO 96/27328   | 09/12/1996   | Bouquet De La Joliniere, et al. |   | ╫              |
|                       |   | WO 99/04704   | 02/04/1999   | McGuckin, et al.                |   | .├─            |
|                       | .+                                      |   | 05/27/1999   | Carroll                         |   | · <del> </del> |
|                       | · <del> </del>                          | WO 99/25248   | .+   |                                 |   | ╁              |
|                       | .+                                      | WO 99/43268   | 09/02/1999   | Barnhart et et                  |   | · <del> </del> |
|                       |   | WO 99/44506   | 09/10/1999   | Burbank, et al.                 | <br>  | ╌              |
| <b></b>               | .‡                                      | WO 99/58065   | 11/18/1999   | Krag                            |   | ┈              |
|                       |   | WO 99/66834   | 12/29/1999   | Fulton, et al.                  |   |                |
|                       | <b></b>                                 | WO 00/10471   | 03/02/2000   | Fulton, et al.                  |   |                |
|                       | 1                                       | WO 00/12009   | 03/09/2000   | Burbank, et al.                 |   |                |
|                       | 1                                       | WO 00/12010   | 03/09/2000   | Sirimanne, et al.               |   |                |
|                       |   | WO 00/13602   | 03/16/2000   | Lee, et al.                     |   | .L             |
|                       | 1                                       | WO 00/16697   | 03/30/2000   | Burbank, et al.                 |   |                |
|                       |   | WO 00/24320   | 05/04/2000   | Esposito, et al.                |   |                |
|                       | †                                       | WO 00/28913   | 05/25/2000   | Carroll                         |   |                |
|                       | 1                                       | WO 00/30531   | 06/02/2000   | Burbank, et al.                 | ·   |                |
| ······                |   | WO 00/33743   | 06/15/2000   | Burbank, et al.                 |   |                |
|                       | *************************************** | WO 01/05317 A1  | 01/25/2001   | Garbagnati, et al.              |   |                |
|                       | <u> </u>                                | WO 01/05320 A1  | 01/25/2001   | Burbank, et al.                 |   |                |
|                       | <u> </u>                                | WO 03/088806 A3   | 10/30/2003   | Su, et al.                      |   |                |
|                       | 1                                       | WO 03/088858 A1   | 10/30/2003   | Prakash, et al.                 |   |                |
|                       | ··†                                     | WO 2005/011049 A3   | 02/03/2005   | Turovskiy, et al.               |   |                |
|                       |   |   |  |                                 | 1   | _              |

| Examiner<br>Signature | Date<br>Considered | · |  |
|-----------------------|--------------------|---|--|
|                       |                    | · |  |

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed another to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.